

THE ALGAE OF NEW JERSEY (U.S.A.) X. BACILLARIOPHYTA
(DIATOMS). A. FRAGILARIALES

MaryAnn Foote
College of Mt. St. Vincent
Riverdale, New York 10471

This is the tenth paper in the series examining the distribution of algae in the state of New Jersey. The genera are listed alphabetically and the collection dates chronologically within them. Further ecological data may be obtained from the original sources. Publication was made possible by a Faculty Development Grant, College of Mt. St. Vincent.

DIVISION BACILLARIOPHYTA

DIATOMS

Fragilariales

Asterionella glacialis Costracane
northern shore (8)

Asterionella ralfsii var americana
Egg Harbor Stream (9)

Diatoma anceps (Ehr) Kirchn
Budd Lake (1); New Brunswick (4)

Diatoma hiemale (Roth) Heiberg
Mullica Hill, Blackwood, Kirkwood, Marlton (1); Oyster Creek
(7)

Diatoma hiemale var mesodon (Ehr) Grun
Metlars Brook (5)

Diatoma tenue var elongatum Lyngb
Lake Hopatcong (10); Hackensack River (11)

Diatoma vulgare Bory
Mullica Hill, Marlton, Drakesville deposit (1); New
Brunswick (4); Metlars Brook (5)

Diatoma vulgare var linearis VH
Lake Hopatcong (10)

Fragilaria bicapitata A. Mayer
Egg Harbor Stream (9)

Fragilaria brevisstrata Grun
Delaware/Raritan Canal (D/R Canal) (3); Lake Hopatcong (10);
Hackensack River (11)

Fragilaria brevisstrata var inflata (Pant) Hust
Lake Hopatcong (10)

Fragilaria capucina Desm
Camden, Kirkwood, Woodstown, Sharptown, Marlton, Hamburg,
Andover, Culvers Gap (1); New Brunswick (4); Lake Hopatcong
(10); Hackensack River (11)

Fragilaria capucina var mesolepta Rabh
Lake Hopatcong (10)

Fragilaria constructa Ehr
Egg Harbor Stream (9)

Fragilaria constricta var trinodes
Egg Harbor Stream (9)

Fragilaria construens (Ehr) Grun
Hamburg, Andover, Waterloo, Drakesville deposit (1); New
Brunswick (4); Egg Harbor Stream (9); Hackensack River (11)

Fragilaria construens var binodes (Ehr) Grun
Absecon Pond (1); Lake Hopatcong (10)

Fragilaria construens var pumile Grun
Lake Hopatcong (10)

Fragilaria construens var subsalina Hust
Egg Harbor Stream (9)

Fragilaria construens var venter (Ehr) Grun
Lake Hopatcong (10)

Fragilaria crotonensis Kitton
D/R Canal (3); Barnegat Bay (6); northern shore (8); Lake
Hopatcong (10); Hackensack River (11)

Fragilaria cylindrus Grun
Barnegat Bay (6)

Fragilaria floridiana Hanna
Oyster Creek (7); Egg Harbor Stream (9)

Fragilaria lapponica Grun
Metlars Brook (5)

Fragilaria leptostauron (Ehr) Hust
Lake Hopatcong (10); Hackensack River (11)

Fragilaria leptostauron var dubia (Grun) Hust
Lake Hopatcong (10)

Fragilaria investiens (W Sm) A Cl
Oyster Creek (7)

Fragilaria nitzschoides Grun
Lake Hopatcong (10)

Fragilaria oceanica Cl
Cape May (2)

Fragilaria pinnata Ehr
northern shore (8); Lake Hopatcong (10); Hackensack River
(11)

Fragilaria strangulata
Egg Harbor Stream (9)

Fragilaria vaucheriae (Kutz) Peters
Lake Hopatcong (10); Hackensack River (11)

Fragilaria virescens Ralfs
springs and brooks (1); D/R Canal (3); New Brunswick (4);
Metlars Brook (5); Oyster Creek (7); Egg Harbor Stream (9);
Lake Hopatcong (10)

Meridion circulare (Grev) Ag
Marlton, Woodstown, Sharptown, Blackwood, Kirkwood, Lake
Como, Andover (1); New Brunswick (4); Metlars Brook (5);
northern shore (8); Hackensack River (11)

Meridion circular var constrictum (Ralfs) VH
freshwater (1); Metlars Brook (5); Hackensack River (11)

Opephora martyii Herib
Oyster Creek (7); Lake Hopatcong (10); Hackensack River (11)

Opephora marina (Greg) Petit
northern shore (8)

Opephora pacifica (Grun) Petit
Oyster Creek (7)

Synedra acus Kutz
D/R Canal (3); New Brunswick (4); Lake Hopatcong (10);
Hackensack River (11)

Synedra amphicephala Kutz
Lake Hopatcong (10)

Synedra capitata Ehr
Hewitts Pond, Drakesville deposit (1)

Synedra delicatissima W Sm
Lake Hopatcong (10); Hackensack River (11)

Synedra fasciculata (Ag) Kutz

Barnegat Bay, Cape May marshes (1); New Brunswick (4);
northern shore (8); Oyster Creek (7); Hackensack River (11)

Synedra fulgens (Grev) W Sm

Shark River, Manasquan River, Shrewsbury River, Barnegat Bay
(1); Atlantic City (2)

Synedra gaillonii (Bory) Ehr

Oyster Creek (7)

Synedra incisa 2

Metlars Brook (5); Hackensack River (11)

Synedra parasitica (W Sm) Hust

Culvers Gap (1); Lake Hopatcong (10); Hackensack River (11)

Synedra parasitica var subconstricta (Grun) Hust

Lake Hopatcong (10)

Synedra pulchella Ralfs ex Kutz

Lake Como, Andover, Marlton (1); Metlars Brook (5); Oyster
Creek (7); northern shore (8); Lake Hopatcong (10)

Synedra pulchella var saxonica (Kutz) Grun

marine, common along coast (1)

Synedra radians kutz

Mullica Hill, Marlton, Lake Hopatcong, Hamburg (1); D/R
Canal (3); Hackensack River (11)

Synedra rumpens Kutz

Metlars Brook (5); Lake Hopatcong (10); Hackensack River
(11)

Synedra rumpens var familiaris (Kutz) Hust

Metlars Brook (5)

Synedra rumpens var fragilarioides Grun

Metlars Brook (5); Hackensack River (11)

Synedra rumpens var meneghiniana Grun

Egg Harbor Stream (9)

Synedra socia Wallace

Metlars Brook (5)

Synedra ulna (Nitz) Ehr

state (1); D/R Canal (3); New Brunswick (4); Metlars Brook
(5); Lake Hopatcong (10); Hackensack River (11)

Synedra ulna var chaseana Thomas

Lake Hopatcong (10)

Synedra ulna var contracta Ostr
Metlars Brook (5)

Synedra ulna var ramesi (Herib) Hust
Metlars Brook (5)

Tabellaria binalis (Ehr) Grun
Egg Harbor Stream (9)

Tabellaria fenestrata (Lyngb)
cedar swamps (1); Pine Barrens (2); D/R Canal (3); Metlars
Brook (5); Egg Harbor Stream (9)

Tabellaria flocculosa (Roth) Kutz
state (1); Pine Barrens (2); Oyster Creek (7); Egg Harbor
Stream (9); Lake Hopatcong (10); Hackensack River (11)

REFERENCES

1. Britton, W. 1889. Catalogue of Plants Found in New Jersey. John L. Murphy Pub Co. Trenton, N.J.
2. Boyer, C.S. 1927. Proceedings of Acad Natl Sci 79:1-582
3. Renlund, R.W. 1953. Ph.D. Dissertation. Rutgers University. New Brunswick, N.J.
4. Keller, J.M. 1954. Ph.D. Dissertation. Rutgers University. New Brunswick, N.J.
5. Edgar, R. 1968. M.S. Thesis. Rutgers University. New Brunswick, N.J.
6. Mountford, K. 1969. M.S. Thesis. Rutgers University. New Brunswick, N.J.
7. Hein, M. 1977. M.S. Thesis. Rutgers University. New Brunswick, N.J.]
8. Olsen, P. and M. Cohn. 1979. Bull NJ Acad Sci 24:59-69
9. Patrick, R and N.A. Roberts. 1979. Algae of the Pine Barrens. IN: R.T.T. Forman, Editor. Pine Barrens: Ecosystem and Landscape. Academic Press. N.Y.
10. Belisle, E. 1983. M.S. Thesis. Rutgers University. New Brunswick, N.J.
11. Foote, M.A. 1983. Ph.D. Dissertation. Rutgers University. New Brunswick, N.J.

THE ALGAE OF NEW JERSEY (U.S.A.) XI. BACILLARIOPHYTA
(DIATOMS). B. EUNOTIALES AND ACHNANTHALES

MaryAnn Foote
College of Mount St. Vincent
Riverdale, New York 10471

This is the eleventh paper in the series examining the distribution of algae in the state of New Jersey. The genera are listed alphabetically and the collection dates chronologically within them. Further ecological data may be obtained from the original sources. Publication was made possible by a Faculty Development Grant, College of Mt. St. Vincent.

DIVISION BACILLARIOPHYTA

DIATOMS

Eunotiales

Eunotia arcus Ehr

Kirkwood, Mullica Hill, Hammonton, Absecon (1); Oyster Creek (7); Lake Hopatcong (11)

Eunotia arcus var bidens Grun

Metlars Brook (5)

Eunotia bactriana Ehr

Tom's River (2)

Eunotia bidentula W Sm

May's Landing, Tom's River (2); Oyster Creek (7); Egg Harbor Stream (9)

Eunotia carolina Patr

Egg Harbor Stream (9)

Eunotia cordillera Hohn & Hellerman

Metlars Brook (5)

Eunotia curvata (Kutz) Lagerst

White Hall, Marlton, Lake Hopatcong, Kirkwood, Sharptown, Lake Como (1); New Brunswick (4); Egg Harbor Stream (9); Lake Hopatcong (11); Hackensack River (12)

Eunotia denticulata var genuina A Cl

Hammonton Pond (1)

Eunotia diodan Ehr

common in ponds and brooks (1)

Eunotia elegans Ostr
Egg Harbor Stream (9)

Eunotia exigua (Breb ex Kutz) Rabh
Absecon, Hammonton, Toms River, Kirkwood, Mullica Hill (1);
Oyster Creek (7); Egg Harbor Stream (9)

Eunotia fallax A Cl
Absecon Pond (1); Egg Harbor Stream (9)

Eunotia flexuosa Breb ex Kutz
Hammonton Pond (1); New Brunswick (2); Oyster Creek (7); Egg
Harbor Stream (9)

Eunotia formica Ehr
Egg Harbor Stream (9); Lake Hopatcong (11)

Eunotia glacialis Meist
Kirkwood, Camden, Marlton, Hammonton, Mullica Hill (1)

Eunotia gracilis var mayeri A Cl
cranberry bogs near Ancora (1)

Eunotia incisa W Sm ex Greg
Mays Landing, Pavonia (1); Egg Harbor Stream (9); Lake
Hopatcong (11)

Eunotia indica Grun
Lake Hopatcong (11)

Eunotia lapponica Grun ex A Cl
Oyster Creek (7)

Eunotia luna Ehr
freshwater (2)

Eunotia maior (W Sm) Rabh
Camden, Lake Hopatcong, Culver's Gap (1)

Eunotia microcephala Krasske ex Hust
Egg Harbor Stream (9)

Eunotia monodon Ehr
common in ponds and meadow ditches (1); Egg Harbor Stream
(9)

Eunotia monodon var constricta Cl-Eul
Egg Harbor Stream (9)

Eunotia naegeli Migula
Egg Harbor Stream (9)

Eunotia pectinalis (O F Muller) Rabh
Hammonton, Sharptown, Culver's Gap (1); cedar swamps (2);

New Brunswick (4); Metlars Brook (5); Oyster Creek (7); Egg Harbor Stream (9)

Eunotia pectinalis var minor Rabh
Metlars Brook (5); Oyster Creek (7); Egg Harbor Stream (9);
Lake Hopatcong (11)

Eunotia pectinalis var recta A Mayer ex Patr
Egg Harbor Stream (9)

Eunotia pectinalis var undulata (Ralfs) Rabh
Ancora, Mays Landing Hammonton, Absecon, Sharptown, Budd
Lake, Lake Hopatcong (1); cedar swamps (2); Egg Harbor
Stream (9); Lake Hopatcong (11)

Eunotia pectinalis var ventricosa Grun
Mays Landing (2)

Eunotia praerupta Ehr
Mullica Hill, Kirkwood, Hammonton, Absecon (1); Metlars
Brook (5); Oyster Creek (7)

Eunotia praerupta var bidens (Ehr) Grun
Egg Harbor Stream (9)

Eunotia pseudopectinalis Hust
Oyster Creek (7)

Eunotia repens var arcuata (Naeg) A Cl
Oyster Creek (7)

Eunotia rostellata Hust ex Patr
Metlars Brook (5); Oyster Creek (7)

Eunotia septentrionales Ostr
Egg Harbor Stream (9)

Eunotia serra Ehr
Ancora, Kirkwood, Toms River, Culver Gap (1); New Brunswick
(4); Oyster Creek (7); Egg Harbor Stream (9); Hackensack
River (12)

Eunotia serra var diadema (Ehr) Patr
Metlars Brook (5); Egg Harbor Stream (9)

Eunotia soleirolii (Kutz) Rabh
Moorestown (2)

Eunotia sudetica O Mull
Egg Harbor Stream (9)

Eunotia tautoniensis Hust ex Patr
Egg Harbor Stream (9)

Eunotia tenella (Grun) Cl

Metlars Brook (5); Egg Harbor Stream (9); Lake Hopatcong (11)

Eunotia triodon Ehr

Toms River, Hammonton, Andover, Culvers Gap, Cape May Point (1)

Eunotia vanheurckii Patr

Egg Harbor Stream (9)

Eunotia vanheurckii var intermedia (Krass ex Hust) Patr

Egg Harbor Stream (9)

Eunotia zygodon Ehr

Toms River (2); Egg Harbor Stream (9)

Peronia fibula (Breb ex Kutz) Ross

Metlars Brook (5)

Achnanthes

Achnanthes biasolettiana (Kutz) Grun

Manahawkin salt marsh (10)

Achnanthes controversa Hust

Oyster Creek (7)

Achnanthes exigua var constricta (Grun) Hust

Lake Hopatcong (11)

Achnanthes fimbriata (Grun) Ross

Oyster Creek (7)

Achnanthes gibberula Grun

New Brunswick (4)

Achnanthes orientalis Hust

Egg Harbor Stream (9)

Achnanthes submarina Hust

Manahawkin salt marsh (10)

Achnanthes stenera Hust

northern shore (8)

Cocconeis costata Greg

northern shore (8)

Cocconeis dirupta var flexella (Jan) Rabh

rare in Manasquan River (1)

Cocconeis discoloides Hust

Oyster Creek (7)

Cocconeis disculus (Schum) Cl
Oyster Creek (7); Hackensack River (12)

Cocconeis fluvitilis Wallace
Hackensack River (12)

Cocconeis molesta (Kutz) Grun
Culver's Gap (1)

Cocconeis ornata Greg
Atlantic City (2)

Cocconeis pediculus Ehr
abundant, statewide (1); Delaware/Raritan Canal (3)

Cocconeis placentula Ehr
fresh water (1); Metlars Brook (5); Oyster Creek (7);
Hackensack River (12)

Cocconeis placentula var euglypta (Ehr) Cl
Metlars Brook (5); Manahawkin salt marsh (10); Oyster Creek
(7); Egg Harbor Stream (9)

Cocconeis placentula var intermedia (Her & Per) Thist
Oyster Creek (7)

Cocconeis placentula var lineata (Ehr) Cl
Dennis Creek (1); Metlars Brook (5); Lake Hopatcong (11);
Hackensack River (12)

Cocconeis pseudodiruptoides Foged
Oyster Creek (7)

Cocconeis quarnerensis (Grun) A S
northern shore (8)

Cocconeis scutellum Ehr
salt and brackish water (1); northern shore (8); Oyster
Creek (7)

Cocconeis scutellum f parva Grun
Oyster Creek (7); Manahawkin salt marsh (10)

Cocconeis scutellum var speciosa (Greg) A Cl
Oyster Creek (7)

Cocconeis scutellum var stauroneiformis W Sm
Oyster Creek (7); Manahawkin salt marsh (10)

Rhoicosphenia curvata (Kutz) Grun ex Rabh
Absecon, Pleasantville (1); New Brunswick (4); Metlars
Brook (5); northern shore (8); Hackensack River (12)

REFERENCES

1. Britton, W. 1889. Catalogue of Plants Found in New Jersey. John L. Murphy Pub Co. Trenton, N.J.
2. Boyer, C.S. 1927. Proceedings of Acad Natl Sci 79:1-582
3. Renlund, R.W. 1953. Ph.D. Dissertation. Rutgers University. New Brunswick, N.J.
4. Keller, J.M. 1954. Ph.D. Dissertation. Rutgers University. New Brunswick, N.J.
5. Edgar, R. 1968. M.S. Thesis. Rutgers University. New Brunswick, N.J.
6. Mountford, K. 1969. M.S. Thesis. Rutgers University. New Brunswick, N.J.
7. Hein, M. 1977. M.S. Thesis. Rutgers University. New Brunswick, N.J.]
8. Olsen, P. and M. Cohn. 1979. Bull NJ Acad Sci 24:59-69
9. Patrick, R and N.A. Roberts. 1979. Algae of the Pine Barrens. IN: R.T.T. Forman, Editor. Pine Barrens: Ecosystem and Landscape. Academic Press. N.Y.
10. Sugihara, T. and C. Yearsley, J.B. Durand and N.P. Psuty. Comparison of Natural and Altered Estuarine Systems: Analysis. Center for Coastal and Environmental Studies. Rutgers University. New Brunswick, N.J.
11. Belisle, E. 1983. M.S. Thesis. Rutgers University. New Brunswick, N.J.
12. Foote, M.A. 1983. Ph.D. Dissertation. Rutgers University. New Brunswick, N.J.